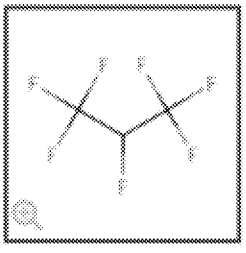
Message

From: Khan, Faruque [Khan.Faruque@epa.gov]
Sent: 5/3/2022 7:56:52 PM
To: Orrick, Greg [Orrick.Greg@epa.gov]; Farruggia, Frank [Farruggia.Frank@epa.gov]
CC: Sankula, Sujatha [Sankula.Sujatha@epa.gov]; Wente, Stephen [Wente.Stephen@epa.gov]
Subject: RE: PFAS and broflanilide

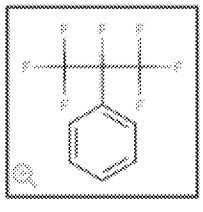
Thanks Greg. F

From: Orrick, Greg <Orrick.Greg@epa.gov>
Sent: Tuesday, May 3, 2022 3:46 PM
To: Khan, Faruque <Khan.Faruque@epa.gov>; Farruggia, Frank <Farruggia.Frank@epa.gov>
Cc: Sankula, Sujatha <Sankula.Sujatha@epa.gov>; Wente, Stephen <Wente.Stephen@epa.gov>
Subject: RE: PFAS and broflanilide

I looked in Comptox at a PFAS degradate likely common to broflanilide and PQZ (heptafluoropropanyl benzene) and a non-PFAS degradate that is also a likely common degradate (perfluoropropane). Other than an inhalation study on perfluoropropane, there were no toxicity data provided. The e-fate data (half-lives of 6-8 days) are predictions based on non-fluorinated compounds, so are uncertain. At least Comptox provided the CAS numbers shown below and has links to literature searches in case we want to dig deeper.



2H-Perfluoropropane
431-89-0 | DTXSID4042048
Searched by InChIKey.



(1,1,1,2,3,3,3-Heptafluoropropan-2-yl)benzene
378-34-7 | DTXSID20896301
Searched by InChIKey.

We do have tox and e-fate data for trifluoroacetic acid (TFAA) and fluoroform, which aren't PFAS under the OPPT definition, but are likely the terminal degradates of PFAS chemicals. These terminal degradates are not very toxic relative to the parent compounds. But they are exquisitely persistent. TFAA may degrade to fluoroform with a half-life of 80 years. And fluoroform is a persistent greenhouse gas that is 12,000 times better at trapping heat in the atmosphere than carbon dioxide.

Greg

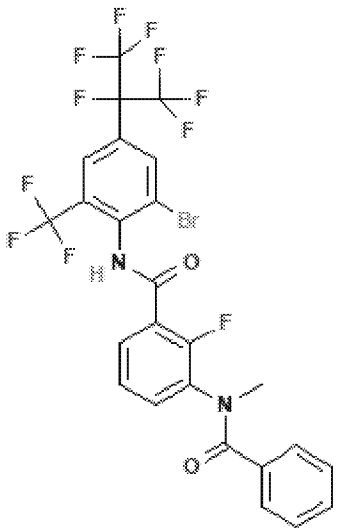
From: Khan, Faruque <Khan.Faruque@epa.gov>
Sent: Monday, March 28, 2022 4:10 PM
To: Leifer, Kerry <Leifer.Kerry@epa.gov>
Cc: Sankula, Sujatha <Sankula.Sujatha@epa.gov>; Orrick, Greg <Orrick.Greg@epa.gov>; Farruggia, Frank <Farruggia.Frank@epa.gov>
Subject: RE: PFAS and broflanilide

Thank you Kerry for your prompt response and confirming our initial thought. Faruque

From: Leifer, Kerry <Leifer.Kerry@epa.gov>
Sent: Monday, March 28, 2022 4:02 PM
To: Khan, Faruque <Khan.Faruque@epa.gov>
Cc: Sankula, Sujatha <Sankula.Sujatha@epa.gov>; Orrick, Greg <Orrick.Greg@epa.gov>; Farruggia, Frank <Farruggia.Frank@epa.gov>
Subject: RE: PFAS and broflanilide

Hi Faruque,

The definition that we (OPP) are using is the OPPT PFAS working definition for TSCA purposes (**CF_2R-CFR'R" where R, R', R" do not equal H**). Broflanilide *does* meet this definition of a PFAS as it contains a CF_3-CF(R)-CF_3 moiety (see structure below).



Hope this helps, please let me know if you have any questions

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Kerry Leifer, Chief (he/him)
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From: Khan, Faruque <Khan.Faruque@epa.gov>
Sent: Monday, March 28, 2022 3:47 PM
To: Leifer, Kerry <Leifer.Kerry@epa.gov>
Cc: Sankula, Sujatha <Sankula.Sujatha@epa.gov>; Orrick, Greg <Orrick.Greg@epa.gov>; Farruggia, Frank <Farruggia.Frank@epa.gov>
Subject: PFAS and broflanilide

Hi Kerry,

Good afternoon. We are planning to meet with RD folks regarding PFAS future briefing related to PQZ and broflanilide next week. I am working on broflanilide in the EFED. I was told that you may have information related PFAS related pesticides. We are interested in finding whether broflanilide is classified as PFAS.
I would appreciate if you have any relevant info related to broflanilide and PFAS to share with us.
Thank you in advance for your help!
Faruque

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